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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,091	07/02/2003	Theodore M. Lach III	13822	5805

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EXAMINER

JACKSON, MONIQUE R

ART UNIT	PAPER NUMBER
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1773

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/612,091	Applicant(s) LACH ET AL.	
	Examiner Monique R. Jackson	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6,7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The amendment filed 10/11/06 has been entered. Claims 1, 4, 6, 7 and 9-20 are pending in the application. Claims 10-20 have been withdrawn from consideration.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Specification

3. The amendment filed 10/11/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the last sentence of the first full paragraph on page 2, namely "the preceding composition percentages, and all composition percentages identified in the present disclosure, are expressed in terms of weight of the sealant material."
4. The Examiner cannot find any support in the original disclosure for this added statement and further notes that "the preceding composition percentages" were all recited as concentrations wherein the term "concentration" is commonly defined as "The amount of a specified substance in a unit amount of another substance" (*Webster's II New Riverside University Dictionary*, 1984, page 293.) Hence, the recitation of a percentage "in terms of weight of the sealant material" does not meet the definition for concentration.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 4, 6, 7 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended Claim 1 recites the limitation “non-expanding, heat-activatable sealant material” however the original disclosure at the time of filing does not support the term “non-expanding”. It is first noted that the sealant material is formed from thermoplastic polymers that by their inherent nature have some degree of thermal expansion. Therefore, considering the original disclosure at the time of filing does not include the term “non-expanding” or a definition of the term, the original disclosure at the time of filing does not support a sealing material that does not exhibit some level of expansion, i.e. non-expanding. Further, the Examiner notes that the original disclosure at the time of filing actually recites that a sealant comprising about 30 percent to about 40 percent EVA, about 30 percent to about 45 percent mineral filler, and about 1 to about 10 percent hydrocarbon resin, “further includes a wax...polyolefin...in a concentration of about 1 percent to about 10 percent” and “a blowing agent in a concentration of about 1 percent to about 10 percent” (Paragraph bridging pages 4-5.) Hence, the original disclosure at the time of filing actually teaches that the sealant material may include a blowing agent and therefore would be even more “expandable” than the inherently thermally-expandable thermoplastic resins alone.

7. The claims are further rejected under 35 U.S.C. 112, first paragraph, for the reasons recited previously with regards to the original disclosure at the time of filing not providing

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sufficient support for the “by weight of the sealant material” concentration limitation. In fact, the Examiner further notes that the original disclosure at the time of filing actually suggests that the mineral filler and hydrocarbon resin percentages are based on “the sealant” or resin not the “sealant material” as a whole as instantly claimed (refer to the paragraph bridging pages 3 and 4; and the first full paragraph on page 4.)

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 4, 6, 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation “non-expanding, heat-activatable sealant material” however since the original disclosure at the time of filing does not provide a clear definition for the term, it is unclear how a sealant material comprising thermoplastic resins that inherently possess a coefficient of thermal expansion could be “non-expanding”. The claims are further rejected as being indefinite because the claims recite concentrations in percentages for various components by weight of the sealant material. However, as stated above, since the definition of concentration is “[t]he amount of a specified substance in a unit amount of another substance”, the instant claims are unclear, particularly since the total percentages recited in the claims can total more or less than 100wt% and the specification actually suggests that the mineral filler and hydrocarbon resin percentages are based on “the sealant” or resin not the “sealant material” as a whole (refer to the paragraph bridging pages 3 and 4; and the first full paragraph on page 4.) Hence one having ordinary skill

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in the art would not be reasonably apprised of the scope of the claimed invention and could not interpret the metes and bounds of the claim so as to understand how to avoid infringement.

Claim Rejections - 35 USC § 103

10. Claims 1, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight et al (USPN 4,619,848) for the reasons recited in the prior office action, wherein Knight et al teach the instantly claimed composition with the exception of specifically reciting calcium carbonate as the 0-10w% inorganic filler/pigment and 2-20wt% slip agent, both of which read upon the instantly claimed “inert mineral filler material”. However, the Examiner maintains her position that calcium carbonate is an obvious species of inorganic filler material, inorganic pigment and inorganic slip agent utilized in the sealant art as evidenced by Blank et al or Douglas or Bryant et al or Samuel et al or Takago et al, and further evidenced by *Ullmann's Encyclopedia of Industrial Chemistry*, Plastics, Additives, 7. Fillers and Coupling Agents (especially sections 7.2 and 7.5) and *Kirk-Othmer Encyclopedia of Chemical Technology*, “Sealants” (sections 2 and 3) and “Calcium Carbonate” (entire article, especially section 6.Uses) and one having ordinary skill in the art at the time of the invention would have been motivated to utilize calcium carbonate, an obvious, naturally occurring and abundant, commonly utilized filler material in the art, as the “inert mineral filler material” in the invention taught by Knight et al.

Response to Arguments

11. Applicant's arguments filed 10/11/06 have been fully considered but they are not persuasive and/or moot in view of the new ground(s) of rejection. Though the rejections over Blank et al have been withdrawn in view of the newly added term “non-expandable”, the

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Examiner reserves the right to reinstate the rejection upon the removal of the new matter limitation. The Examiner further notes that contrary to Applicant's remark (page 9, lines 1-2; "In fact, as the Examiner has noted, the sealant material of the instant material does not even contain a blowing agent"), the Examiner cannot find where she noted previously that the instant sealant did not contain a blowing agent. In fact, as discussed above, the original disclosure at the time of the invention actually states at page 5, lines 6-7, that a blowing agent in an amount of "about 1 percent to about 10 percent" may be included in the instant sealant material. With respect to Knight et al, the Applicant argues that the Examiner has allegedly not met her burden of proving a prima facie case of obviousness, wherein the Applicant argues that Knight et al actually teach away from using any type of filler in the instantly claimed percentages. The Examiner respectfully disagrees. The Examiner first notes that Applicant's arguments are only directed to calcium carbonate as the inorganic pigment or filler recited by Knight et al, however, in the previous rejection, the Examiner clearly equated both the 0-10wt% inorganic pigment or filler as well as the 0.2-20wt% slip agent to the instantly claimed inert filler material. Since the Applicant did not dispute the Examiner's position with regards to both ingredients reading upon the inert filler, the Examiner maintains her position that Knight et al do in fact teach a range of "inert filler material", namely 0.2-30wt%, that overlaps and hence reads upon the claimed range of 20-45wt% as well as the narrower range of 25-30wt% recited in Claim 6. The only remaining issue is whether it would have been obvious to one having ordinary skill in the art to utilize calcium carbonate for these components in the invention taught by Knight et al. The Examiner maintains her position that calcium carbonate would have been obvious for the reasons recited previously and restated above, and provides further evidence to support her position, namely the

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above noted sections from *Kirk-Othmer Encyclopedia of Chemical Technology* and *Ullmann's Encyclopedia of Industrial Chemistry*, all three articles posted online in 2000, wherein *Ullmann's* actually recites that “[c]alcium carbonate is quantitatively the most important filler” in plastics.

Hence, in the absence of a showing of unexpected results, the Examiner maintains that the instantly claimed invention would have been obvious over the teachings of Knight et al.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Monique R. Jackson
Primary Examiner
Technology Center 1700
December 12, 2006